Title: Exploring the Universe with WISE and Cloud Computing

Abstract: WISE is a recently-completed astronomical survey mission that has imaged the entire sky in four infrared wavelength bands. The large quantity of science images returned consists of 2,776,922 individual snapshots in various locations in each band which, along with ancillary data, totals around 110TB of raw, uncompressed data. Making the most use of this data requires advanced computing resources. I will discuss some initial attempts in the use of cloud computing to make this large problem tractable.

Venue: Giving a portion of the invited keynote address at 'Big Data: Mastering New Data Platforms, Data Products & Emerging Data Economies'

Dominic J. Benford

NASA / Goddard Space Flight Center

Code 665 - Observational Cosmology Lab
Greenbelt, MD 20771 USA

Dominic Benford@nasa.gov

(301) 286-8771 (office)

(301) 286-3902 (Michele)

(301) 286-7230 (fax)